

a' cont.
SUB
B3
CONT.

45% identical to the nucleotide sequence of SEQ ID NO:2, 4, 6, 8, or 10, the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____, or a complement thereof;

b) a nucleic acid molecule comprising a fragment of at least 15 nucleotides of the nucleotide sequence of SEQ ID NO:2, 4, 6, 8, or 10, the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, or _____, or a complement thereof;

c) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____;

d) a nucleic acid molecule which encodes a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____, wherein the fragment comprises at least 12 contiguous amino acids of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, or _____; and

e) a nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____, wherein the nucleic acid molecule hybridizes to a nucleic acid molecule comprising SEQ ID NO:2, 4, 6, 8, or 10, or a complement thereof under stringent conditions.

A

a' cont.
SUB
B3
CONT.

62. The isolated nucleic acid molecule of claim 61, which is selected from the group consisting of:

- a) a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:2, 4, 6, 8, or 10, the cDNA insert of any one the plasmids deposited with ATCC as Patent Deposit Numbers ____, ____, ____, ____, or ____, or a complement thereof; and
- b) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers ____, ____, ____, ____, or ____.

sub C1

63. The nucleic acid molecule of claim 61 further comprising vector nucleic acid sequences.

64. The nucleic acid molecule of claim 61 further comprising nucleic acid sequences encoding a heterologous polypeptide.

65. A host cell which contains the nucleic acid molecule of claim 61.

5 66. The host cell of claim 65 which is a mammalian host cell.

sub C2

67. A nonhuman mammalian host cell containing the nucleic acid molecule of claim 61.

68. An isolated polypeptide selected from the group consisting of:

- a) a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of
- 117
- A

@ cont.

any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, or _____, wherein the fragment comprises at least 12 contiguous amino acids of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, or _____;

b) a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, or _____, wherein the polypeptide is encoded by a nucleic acid molecule which hybridizes to a nucleic acid molecule comprising SEQ ID NO:2, 4, 6, 8, or 19, or a complement thereof under stringent conditions; and

c) a polypeptide which is encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 45% identical to a nucleic acid comprising the nucleotide sequence of SEQ ID NO:2, 4, 6, 8, or 10, or a complement thereof.

C

69. The isolated polypeptide of claim 68 comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____.

70. The polypeptide of claim 68 further comprising heterologous amino acid sequences.

71. An antibody which selectively binds to a polypeptide of claim 68.

A

- a! cont.
72. A method for producing a polypeptide selected from the group consisting of:
- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____;
 - b) a polypeptide comprising a fragment of the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____, wherein the fragment comprises at least 12 contiguous amino acids of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____; and
 - c) a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9, or an amino acid sequence encoded by the cDNA insert of any one of the plasmids deposited with ATCC as Patent Deposit Numbers _____, _____, _____, _____, or _____, wherein the polypeptide is encoded by a nucleic acid molecule which hybridizes to a nucleic acid molecule comprising SEQ ID NO:2, 4, 6, 8, or 10, or a complement thereof under stringent conditions; comprising culturing the host cell of claim 65 under conditions in which the nucleic acid molecule is expressed.

73. The method of claim 72 wherein said polypeptide comprises the amino acid sequence of SEQ ID NO:1, 3, 5, 7, or 9.

a! cont.

74. A method for detecting the presence of a polypeptide of claim 68 in a sample, comprising:

- a) contacting the sample with a compound which selectively binds to a polypeptide of claim 68; and
- b) determining whether the compound binds to the polypeptide in the sample.

75. The method of claim 74, wherein the compound which binds to the polypeptide is an antibody.

C

76. A kit comprising a compound which selectively binds to a polypeptide of claim 68 and instructions for use.

Sub 3

77. A method for detecting the presence of a nucleic acid molecule of claim 61 in a sample, comprising the steps of:

- a) contacting the sample with a nucleic acid probe or primer which selectively hybridizes to the nucleic acid molecule; and
- b) determining whether the nucleic acid probe or primer binds to a nucleic acid molecule in the sample.

78. The method of claim 77, wherein the sample comprises mRNA molecules and is contacted with a nucleic acid probe.

79. A kit comprising a compound which selectively hybridizes to a nucleic acid molecule of claim 61 and instructions for use.

21 cont.

80. A method for identifying a compound which binds to a polypeptide of claim 68 comprising the steps of:

- a) contacting a polypeptide, or a cell expressing a polypeptide of claim 68 with a test compound; and
- b) determining whether the polypeptide binds to the test compound.

81. The method of claim 80, wherein the binding of the test compound to the polypeptide is detected by a method selected from the group consisting of:

- a) detection of binding by direct detecting of test compound/polypeptide binding;
- b) detection of binding using a competition binding assay;
- c) detection of binding using an assay for GPCR-like-mediated signal transduction.

82. A method for modulating the activity of a polypeptide of claim 68 comprising contacting a polypeptide or a cell expressing a polypeptide of claim 68 with a compound which binds to the polypeptide in a sufficient concentration to modulate the activity of the polypeptide.

83. A method for identifying a compound which modulates the activity of a polypeptide of claim 68, comprising:

- a) contacting a polypeptide of claim 68 with a test compound; and
- b) determining the effect of the test compound on the activity of the polypeptide to thereby identify a compound which modulates the activity of the polypeptide.